



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,382	02/26/2002	Daniel White Sexton	120840	4580
6147	7590	06/12/2006	EXAMINER	
GENERAL ELECTRIC COMPANY GLOBAL RESEARCH PATENT DOCKET RM. BLDG. K1-4A59 NISKAYUNA, NY 12309			TRAN, THIEN D	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,382

Applicant(s)

SEXTON ET AL.

Examiner

Thien D. Tran

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-22 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-13 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 9-13 are rejected under 35 U.S.C. 102(e) as being participated by Sivaprakasam (US Patent No. 6785513).

Regarding claim 1, Sivaprakasam discloses a method for communicating a message over a radio frequency (RF) communications network having a plurality of RF channels, the method comprising the steps of:

partitioning the message into a plurality of blocks having a predetermined order;
converting the plurality of blocks into a plurality of packets (modulating data into packets for transmitting, figure 3, col.5 lines 50-55);

selecting a subset of the plurality of packets (col.5 lines 50-55);

transmitting the selected subset of the plurality of packets over at least one of the plurality of RF channels of the RF communications network (plurality of carriers or sub-bands, col.5 lines 50-55);

receiving the selected subset of the plurality of packets transmitted over the at least one of the plurality of RF channels (col.14 lines 35-50);

estimating a quality of the at least one of the plurality of RF channels from at least the received selected subset of the plurality of packets (col.22 lines 5-10); and

constructing an estimate of the message using at least the received selected subset of the plurality of packets and the estimated quality of the at least one of the plurality of RF channels (col.12 lines 15-25).

Regarding claim 2, Sivaprakasam discloses that each of the plurality of packets comprises at least a block number field, a block field and an error control field (col.14 lines 55-67).

Regarding claim 3, Sivaprakasam discloses that the error control field comprises a cyclic redundancy code (col.14 lines 55-67).

Regarding claim 4, Sivaprakasam that the error control field comprises forward error correction coding information (col.14 lines 55-67).

Regarding claim 5, Sivaprakasam discloses that the subset of the plurality of packets comprises selecting the subset of the plurality of packets having a predetermined probability of error-free reception (col.15 lines 55-65).

Regarding claim 6, Sivaprakasam discloses that the selected subset of the plurality of packets uses orthogonal frequency division multiplexing (OFDM) communication techniques (col.16 line 35).

Regarding claim 7, Sivaprakasam discloses that the selected subset of the plurality of packets transmits the selected subset of the plurality of packets using

communication techniques selected from the groups consisting of Bluetooth communications techniques and IEEE standard 802.11 communications techniques (col.4 lines 25-30).

Regarding claim 9, Sivaprakasam discloses that characteristics comprise at least jamming pulse duration and jamming pulse repetition time (figure 16).

Regarding claims 10, 11, Sivaprakasam discloses that comprises processing the received selected subset of the plurality of packets to yield the plurality of blocks of the message (modulating data into packets for transmitting, figure 3, col.5 lines 50-55).

Regarding claims 12, Sivaprakasam discloses that the selected subset of the plurality of packets uses Bluetooth communications techniques (col.4 lines 25-30).

Regarding claims 13, Sivaprakasam discloses that the step of transmitting the selected subset of the plurality of packets uses IEEE standard 802.11 communication techniques (col.4 lines 25-30).

Allowable Subject Matter

2. Claims 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. Claims 14-22 are allowed.

Response to Arguments

4. Applicant's arguments filed 03/17/2006 have been fully considered but they are not persuasive.

Regarding claim 1, Applicant argues that the US Patent No. 6785513 does not disclose the estimation of a quality of a message. In response to the argument, the limitation "estimation of a quality of a message" is not recited in the claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding claim 5, Applicant argues that that the US Patent No. 6785513 does not disclose subset of the plurality of packets having a predetermined probability of error-free reception. However, Examiner respectfully disagrees with the argument because the US Patent No. 6785513 (col.15 lines 55-65) discloses subset of the plurality of packets having probability of error-free reception, (packets having a small percentage of errors, col.15 lines 55-65).

Regarding claims 10, 11 and 17, applicant argues that the US Patent No. 6785513 does not disclose the processing of the received subset of packets. However, Examiner respectfully disagrees with argument because the US Patent No. 6785513 discloses the processing of received subset of packets (processor 100, figure 15, processing received packet data, col.22 lines 28-40).

Conclusion

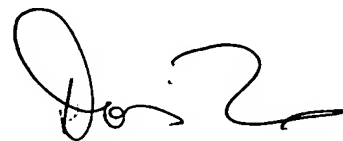
5. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thien Tran whose telephone number is (571) 272-3156. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To, can be reached on (571) 272-7629. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

Patent Examiner

Thien Tran



DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600